

## 09473000 ARAVAIPA CREEK NEAR MAMMOTH, AZ

**LOCATION**--Lat 32°50'37", long 110°37'09", in NW<sub>1/4</sub>NW<sub>1/4</sub> sec. 9, T.7 S., R.17 E., Pinal County, Hydrologic Unit 15050203, on right bank 6 mi upstream from mouth and 9 mi north of Mammoth.

**DRAINAGE AREA**--537 mi<sup>2</sup>.

**PERIOD OF RECORD**--May 1931 to Dec. 1942 (published as "near Feldman"), May 1966 to current year. Monthly discharge only July 1941 to Sept. 1941, published in WSP 1313.

**REVISED RECORDS**--WDR AZ-68-1: 1967. WDR AZ-82-1: 1968, 1969, 1973, 1979 (M). WDR AZ-90-1: Drainage area.

**GAGE**--Water-stage recorder and, since Mar. 1980, crest-stage gage. Elevation of gage is 2,345 ft above sea level, from topographic map. Oct. 1, 1981, to Oct. 1, 1983, gage at site 300 ft upstream at datum 4.19 ft higher. Prior to Oct. 1, 1981, at datum 1.00 ft higher. May 1931 to Dec. 1942 at site 0.3 mi downstream at different datum.

**REMARKS**--Records fair except for estimated daily discharges, which are poor. Diversions for irrigation of several hundred acres above station.

**EXTREMES FOR PERIOD OF RECORD**--Maximum discharge since at least 1919, 70,800 ft<sup>3</sup>/s Oct. 1, 1983, from slope-area measurement of peak flow, gage height, 16.76 ft, from profile past gage; minimum, 0.3 ft<sup>3</sup>/s Aug. 30, 1940.

**EXTREMES OUTSIDE PERIOD OF RECORD**--A discharge of 20,000 ft<sup>3</sup>/s occurred Aug. 2, 1919, at site of former gaging station 6 mi downstream, operated Apr. 1919 to Sept. 1921, gage height, 6.3 ft, from floodmark, site and datum then in use, from rating curve extended above 5,100 ft<sup>3</sup>/s on basis of velocity-area study.

**EXTREMES FOR CURRENT YEAR**--Peak discharges greater than base discharge of 2,500 ft<sup>3</sup>/s and (or) maximum (\*), from rating curve extended above 130 ft<sup>3</sup>/s on the basis of slope-area measurement at gage height 16.76 ft:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Aug. 3 .....	0008	*3,030	*9.94

Minimum daily discharge, 0.45 ft<sup>3</sup>/s July 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	9.5	12	10	21	19	13	7.5	2.3	1.00	12	20
2	5.0	9.7	12	8.9	19	18	12	7.3	2.4	1.1	113	53
3	5.0	10	12	15	18	18	12	7.1	2.4	1.1	319	12
4	5.1	9.6	12	242	18	18	12	6.9	2.1	0.95	92	11
5	4.8	9.1	13	162	17	19	12	6.7	2.0	0.94	102	11
6	4.6	9.3	13	42	18	20	11	6.9	2.2	0.88	48	11
7	4.6	9.4	13	23	18	21	11	7.6	2.5	0.88	38	11
8	4.6	9.9	12	18	17	18	11	8.0	2.5	0.90	32	e17
9	4.5	9.9	12	17	17	17	11	7.8	2.4	0.71	28	e13
10	4.5	10	12	15	17	17	11	7.7	2.4	0.64	28	e14
11	4.9	9.9	12	15	21	17	11	7.7	2.2	0.54	25	e13
12	5.1	10	13	17	506	16	11	7.5	2.3	0.56	88	e13
13	5.2	10	13	16	437	16	10	6.8	1.9	0.64	63	13
14	5.1	10	13	15	122	16	10	5.8	1.8	0.62	36	12
15	5.4	10	14	15	47	15	9.6	5.2	2.0	0.46	35	11
16	5.4	11	14	15	33	15	9.3	4.8	1.4	0.49	17	11
17	5.6	11	14	15	28	15	8.9	4.4	1.4	0.58	19	10
18	6.0	11	15	14	82	16	8.8	4.2	1.4	0.78	16	10
19	6.3	11	15	14	120	15	8.8	3.9	1.4	0.60	36	10
20	6.2	11	15	14	134	15	8.7	3.6	1.3	0.45	30	10
21	6.3	11	15	14	46	15	8.7	3.2	1.2	11	22	9.6
22	8.2	11	15	13	32	14	8.5	2.8	1.0	4.9	22	9.4
23	7.8	12	15	13	27	15	8.5	2.7	1.0	3.1	93	9.1
24	7.6	12	15	13	24	14	10	2.6	1.1	3.2	31	8.8
25	7.6	12	16	13	22	14	10	2.5	1.0	2.6	24	8.3
26	7.7	11	16	16	21	14	9.3	2.5	1.1	3.4	e24	8.4
27	8.7	11	15	111	19	13	8.8	2.3	0.93	7.1	24	7.9
28	8.7	11	16	43	19	13	8.5	2.4	0.92	10	23	7.4
29	9.8	11	39	29	---	13	8.4	2.5	0.96	1.3	e23	7.0
30	9.5	11	76	25	---	13	7.8	2.5	0.92	1.0	19	6.5
31	9.7	---	15	22	---	13	---	2.4	---	22	18	---
TOTAL	194.5	314.3	514	1014.9	1920	492	300.6	155.8	50.43	84.42	1500	368.4
MEAN	6.27	10.5	16.6	32.7	68.6	15.9	10.0	5.03	1.68	2.72	48.4	12.3
MAX	9.8	12	76	242	506	21	13	8.0	2.5	22	319	53
MIN	4.5	9.1	12	8.9	17	13	7.8	2.3	0.92	0.45	12	6.5
AC-FT	386	623	1020	2010	3810	976	596	309	100	167	2980	731
CFSM	0.01	0.02	0.03	0.06	0.13	0.03	0.02	0.01	0.00	0.01	0.09	0.02
IN.	0.01	0.02	0.04	0.07	0.13	0.03	0.02	0.01	0.00	0.01	0.10	0.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2005, BY WATER YEAR (WY)

(WY)	1984	1979	1979	1993	1983	1991	1993	1979	1940	1942	1935	1984
MIN	6.00	8.70	9.69	10.1	11.1	9.49	7.17	3.45	1.51	2.58	7.81	5.35
(WY)	2004	1940	1971	1940	1977	1976	1976	2004	2004	2004	1975	1973

SUMMARY STATISTICS FOR 2004 CALENDAR YEAR FOR 2005 WATER YEAR WATER YEARS 1932 - 2005

ANNUAL TOTAL	4256.26	6909.35	
ANNUAL MEAN	11.6	18.9	33.0
HIGHEST ANNUAL MEAN			140
LOWEST ANNUAL MEAN			9.62
HIGHEST DAILY MEAN	461	Mar 5	1976
LOWEST DAILY MEAN	0.60	Jul 12	0.40
ANNUAL SEVEN-DAY MINIMUM	0.72	Jul 6	0.56
ANNUAL RUNOFF (AC-FT)	8440	13700	23910
ANNUAL RUNOFF (CFSM)	0.022	0.035	0.061
ANNUAL RUNOFF (INCHES)	0.29	0.48	0.83
10 PERCENT EXCEEDS	16	28	43
50 PERCENT EXCEEDS	9.4	11	16
90 PERCENT EXCEEDS	1.7	1.4	6.0